research highlights

WILDFIRES

California nightmare

Earth's Future http://doi.org/c8rn (2019).



Credit: RINGO CHIU / Stringer / Getty Images

The American state of California may be one of the most studied wildfire areas in the world, but that does not mean that the conditions there are not worth continued research, especially as trends become more alarming.

A. Park Williams, at Columbia University, and colleagues examined nearly 40,000 wildfires in the state from 1972–2018, finding that the extent of annual fire-burned area increased fivefold during this time, with an eightfold increase during summers, and the vast majority of the fire increase occurring in the northern and Sierra Nevada regions of California. Much of this increase — both natural and human

caused — is likely due to the 1.4 °C increase in summer temperatures during this time span, though the authors controlled and studied a vast array of other factors on wildfire incidence. The fire and climate trends culminated in 2017 and 2018 being the third and first most destructive years for California, respectively — a potential harbinger of years still to come for the state and other arid, populated regions around the world.

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